

RECREATIONAL RESOURCES

*There are no larger fields,
No worthier games
than may here be played.*

—Henry David Thoreau



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New England's environment offers us a myriad of recreational opportunities. From Cape Cod's sandy beaches and the breathtaking sightings of migrating whales in the Gulf of Maine, to meandering trails and snow-custed mountain peaks, New England's network of parks and refuges gives visitors a chance to see hundreds of unique plant and wildlife communities (Figure 1).

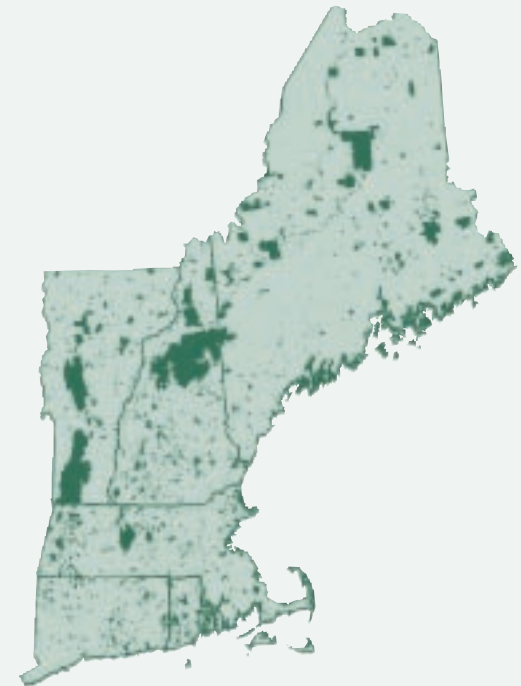
New England attracts tourists – from all over the country and world – who spend \$18 billion in the region every year. More than 400,000 jobs in New England are supported by travel and tourism, and tax revenues from regional tourism total almost \$2.4 billion annually. Although these industries significantly impact the region's natural environment, they are themselves dependent on its quality.

Enjoying the outdoors has always been an integral part of New England's culture, and many of our outdoor activities help promote and protect the region's natural ecosystems. However, providing for all types of recreational activities while protecting our valuable resources requires careful collaboration and cooperation among citizens, government agencies, and businesses. Our challenge is to work together to minimize or eliminate the damage our recreational activities cause to ecosystems, and the plant and animal habitats they contain. Growing public interest in recreational activities that do not damage the environment is a promising sign that many of our activities can evolve to coexist with preservation of our ecosystems.

IN THE SWIM

From the rocky coastal areas of northern New England to the gently sloping beaches of Cape Cod, New England's 7,586-mile shoreline and its many lakes are playgrounds for swimmers during hot summer months. Second only to walking, swimming is the most popular recreational activity in the nation. One of the goals of the Clean Water Act is to ensure that all of our waters are safe for swimming. To date, 93% of New England's coastal waters fully support swimming, as do 84% of our lakes and 97% of our

Recreation Figure 1 Protected Areas in New England Park, Conservation, Wildlife, & Recreational Lands



Source: State GIS data

A WIN FOR THE NASHUA RIVER WATERSHED

As part of a settlement arising from Clean Water Act violations, EPA directed CPF, Inc. to implement a Supplemental Environmental Project in 1996 that included provisions to improve conditions and provide for recreational enjoyment of water resources in the Nashua River Watershed. CPF was required to: 1) purchase land on the Nashua River that will be managed by the Massachusetts Division of Fisheries and Wildlife for water quality protection, habitat, and recreational purposes; 2) fund the Nashua River Watershed Association (NRWA) in the use of natural materials and plantings to rehabilitate a crumbling river bank wall causing an erosion problem in the Squannacook River – a prime trout fishery and canoeing river and a tributary to the Nashua River; and 3) fund a sewer stenciling project that will prevent the dumping of pollutants into storm drains, to be carried out by high school students in each community.

river miles. Nevertheless, there is a lot of work to do before we meet our goal of no beach closures and 100% swimmable waters.

In 1996, there were more than 130 beach closures in New England, forty more closures than the previous summer. This increase is primarily the result of substantial rainfall and subsequent stormwater runoff from the summer of 1995, as well as a greater monitoring effort. Stormwater runoff, failed septic systems, and combined sewer overflows lead to bacterial contamination, which is the primary pollutant affecting the “swimmability” of our waters.

EPA is working with states and local communities to locate and upgrade septic systems, and to eliminate combined sewer overflow systems in many parts of New England. At the same time, agricultural communities are implementing controls to eliminate bacterial pollution from their livestock.

BOATING COUNTRY

Normally, about 98% of our river miles and 86% of our lakes support some type of recreational boating in the form of canoeing, rafting, sailing, or power boating. Nationally, about 300 million boating trips are made every year, with more than half of these involving power boats. Boat sales are estimated to be more than \$14 billion a year, and more than 6,000 companies are involved in manufacturing boats, trailers, motors, and boating accessories.

One of the ways in which EPA, the states, and our partners in coastal areas have been working to minimize the impact of boating on water quality in New England is through boat pump-out stations. The Clean Vessel Act of 1992 authorized a five-year competitive grant program for states to construct or renovate pump-out and dump stations for disposal of recreational vessel sewage. The grant program is now in its final year and all six New England states have taken advantage of the program. To date, about 190 pump-out facilities are available to the public.

TRAILS AND PATHS AND TRACKS

With our growing interest in biking, running, walking, and in-line skating, we increasingly look for scenic enjoyment and a safe haven from automotive traffic, particularly in more developed areas. Trails provide an outdoor recreational resource for both urban and rural residents alike, and an increasing number of people are using trails for a multitude of activities, including cross-country skiing, hiking, and snowmobiling (Figure 2).

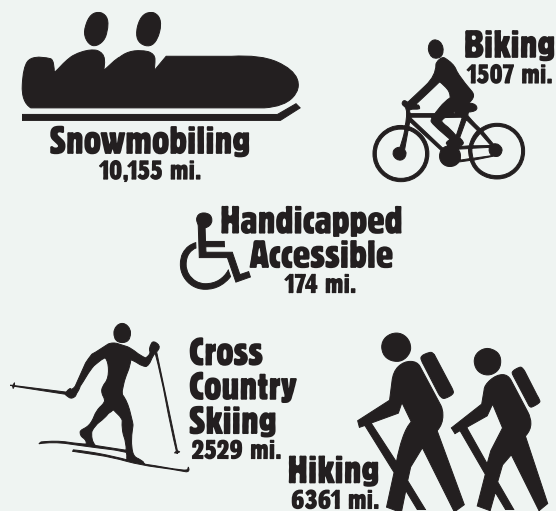
To date, there are more than 16,000 miles of trails in New England; 44% of these are public, with another 5% in protected private ownership. Two-thirds of our trails are in good condition, requiring only annual maintenance. Upkeep of these trails is the result of hard work by individual volunteers and volunteer organizations who collectively maintain 81% of the trails in New England.

One example of EPA’s support of recreation in New England is the Urban Environmental Initiative in Providence, Rhode Island, which is planning to create a greenway and bikepath along 4.4 miles of the Woonasquatucket River. EPA has created a map that identifies the location of wetlands along the river. This information will reduce greenway and bikepath planning and engineering costs, and will be used by schools to adopt wetlands and create river outreach materials, protecting the river while increasing recreational opportunities.

FISH AND FISHING

With an abundance of streams and lakes providing habit for a diversity of warm and cold water fish species, New England states issue approximately one million freshwater fishing licenses each year. Recreational marine fishing is also popular, with almost

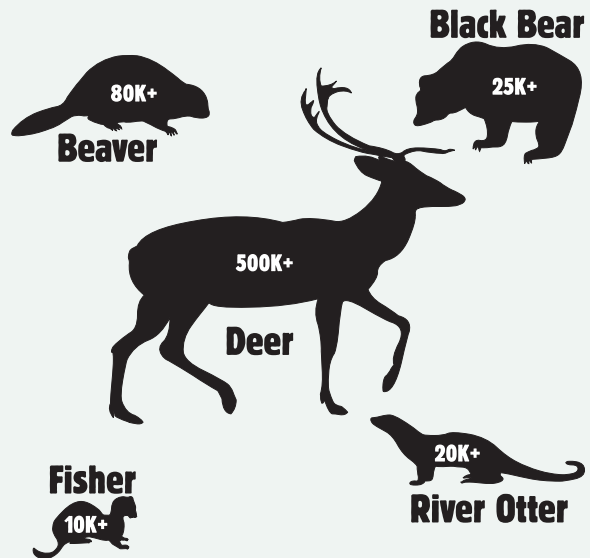
Recreation Figure 2 An Abundance of Trails in New England Totals Include Overlapping Miles



Source: U.S. Department of Interior, National Survey of Fishing, Hunting & Wildlife Associated Recreation, 1991

Recreation Figure 3

New England Mammal Population is Increasing



Source: State Fish and Wildlife Departments

800,000 fishing opportunities through which 22 million pounds of fish are caught each year. By comparison, the commercial catch in the region totals approximately 560 million pounds per year.

Part of EPA's work is to recover degraded environmental resources and promote the public's enjoyment of improved areas. As of 1996, 93% of our river miles, 81% of our lake acreage, and 81% of our estuaries were available for recreational fishing. Unfortunately, fish advisories and shellfish bed closures limit consumption, as discussed in the Public Health section of this report.

An example of EPA's role in fish habitat restoration is the Central Artery/Third Harbor Tunnel Project, in which the Commonwealth of Massachusetts proposed to expand Spectacle Island in Boston

THE KILLINGTON SKI AREA

The Killington ski area in Vermont has been working to find environmentally acceptable sources of water to make snow. Diverse groups with conflicting interests were involved in the process that led to a Memorandum of Agreement (MOA) signed by Killington and State of Vermont Agency of Natural Resources (VTANR) in July 1996. Killington has offered to give the state nearly 3,000 acres of prime bear habitat in exchange for about 1,000 acres of adjacent state land that contains no sensitive habitats or unique environmental values, and on which it can expand its ski resort. The agreement also provides a source of water for making snow from Woodward Reservoir, which is owned and managed by the Farm and Wilderness Foundation. The reservoir will allow Killington to restore and maintain winter flows sufficient for aquatic life in its current water withdrawal sources: the Falls River, Roaring Brook, and the Ottauquechee River.

Harbor by filling 110 acres of marine habitat. EPA opposed the magnitude of the initial plan, and an agreement was reached for a 12-acre expansion with an aquatic habitat mitigation that includes construction of an artificial reef near Spectacle Island Park. The reef complex will consist of a number of smaller cobble, rock, and prefabricated structures, and will cover 88,000 square feet, providing high-quality lobster and fish habitat. It can also be easily used by recreational fishermen from Boston Harbor's Long Island shore and small boats.

EPA is funding the Salmon River Bank Stabilization Demonstration Project in Connecticut, which is utilizing structural and bioengineering techniques to stabilize approximately 200 feet of eroded stream bank in order to reduce sedimentation. The Salmon River is one of the key rivers in the multi-agency Atlantic salmon restoration program. The project also includes a series of interpretive signs to educate anglers and other visitors about the importance of maintaining vegetation along river and stream banks to protect vital spawning habitat for salmon and other fish.

CANDID CAMERAS

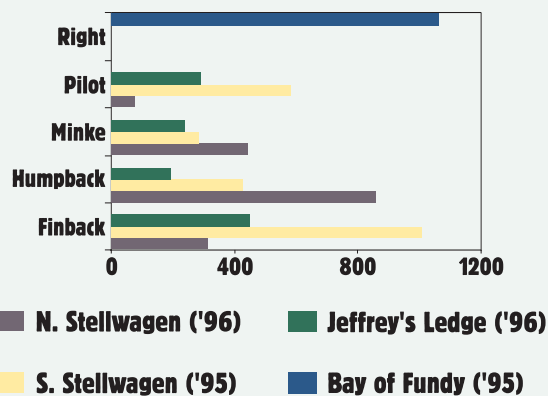
More than 4 million people in New England enjoy observing and photographing birds and other wildlife. In partnership with state and local organizations, EPA's Resource Protection Projects, discussed in the New England Ecosystems section,

identify relatively undisturbed areas with sensitive and valuable ecological resources for protection. Many of our large mammals are increasing in population (Figure 3). New England's diverse environments also provide abundant areas to observe breeding, migrating, and overwintering bird communities. Birdwatching is a growing activity in New England and across the country. In the past five years, membership in the American Birding Association has nearly tripled, while New England has more birders and bird clubs in proportion to total population than anywhere else in the United States.

Many areas of New England have seen a decline in neotropical migratory species as a group. Neotropicals include warblers, tanagers, flycatchers, thrushes, and other species that breed in temperate zones and winter in the tropics. While the causes of these declines are numerous and complex, two major factors are the fragmentation of once-extensive forests and the loss of important wetland habitats due to development. Grassland species, which depend on extensive unmown fields, have declined drastically in recent decades, due to loss of grassland habitat and early mowing of remaining grasslands, which destroys nests before the young have fledged. Urban birds, on the other hand, are thriving, particularly in developed areas of New England; this group contains the fewest and the most generalized species, however.

Recreation Figure 4

Whale Sightings Off New England Shores



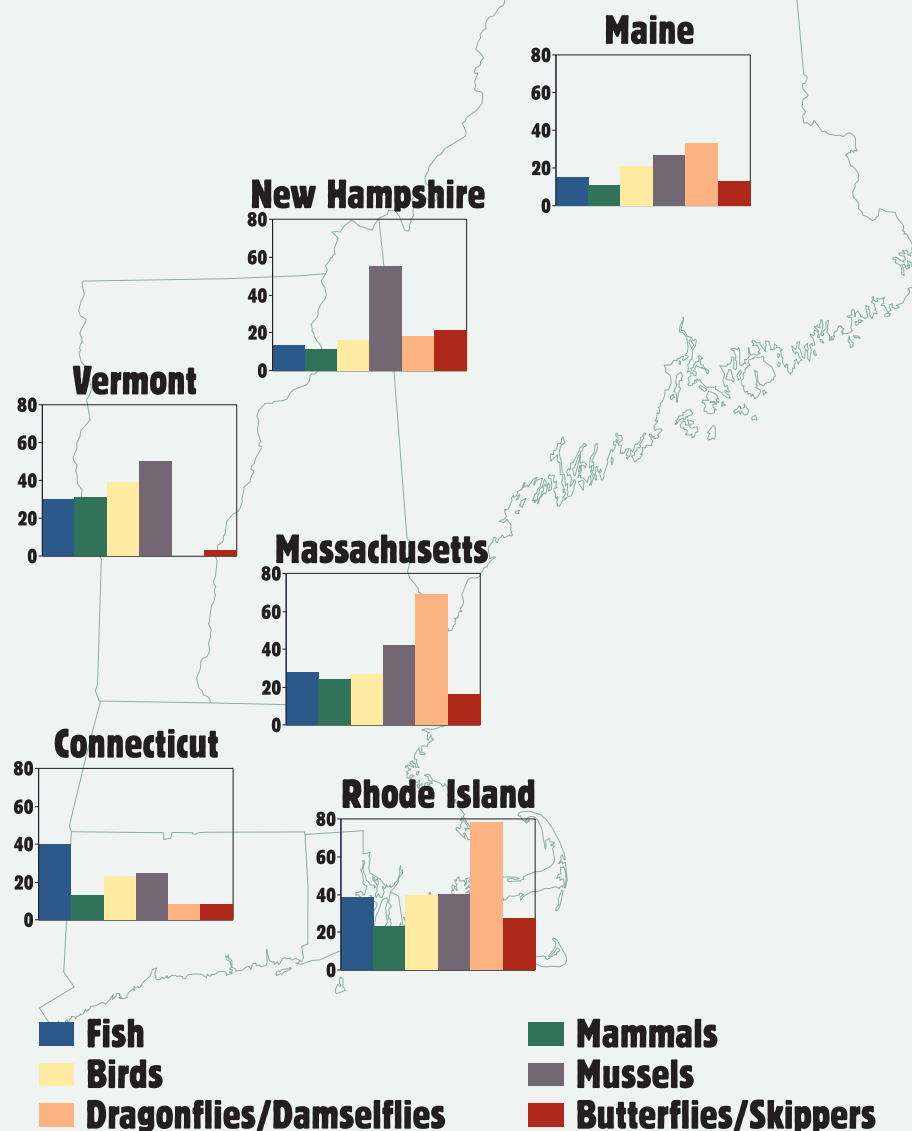
Source: Center for Coastal Studies, Center for Oceanic Research & Education, and New England Aquarium

New England's economic and cultural history is intimately connected with the whales that migrate every year just off our shores. Now protected from hunting pressures that once decimated whale populations, they are among the marine mammals that have most fascinated and inspired people throughout history.

The World Wildlife Fund recently designated Cape Cod as the best whale watching location in North America and one of the five best locations in the world. Our whales spend their summers off the New England coasts and migrate south in the winter, to breed in the waters off the southern coast of South America. Numbers and species of whales have fluctuated in response to environmental stresses, food supplies, and population dynamics (Figure 4). EPA is currently funding investigations, as part of a research effort to understand changes in whale populations, about the effects of contaminants on whales.

Percent of Species at Risk in New England

Many native species are endangered due to contaminants, loss of suitable habitat, or competition from alien species.



Source: The Nature Conservancy, 1996